

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A superconducting device having comprising:

an oxide superconducting wire comprising an oxide superconductor having a sheath portion covering said oxide superconductor and the sheath portion comprising one of silver or a silver alloy, with an oxide superconductor exhibiting sintering density of at least 93 %;

wherein said oxide superconductor is a Bi-Pb-Sr-Ca-Cu-O-based oxide superconductor containing bismuth, lead, strontium, calcium and copper and including a Bi2223 phase having atomic ratios of (bismuth and lead):strontium:calcium:copper expressed as 2:2:2:3 in approximation; and

and the oxide superconductor exhibits a sintering density of at least 93 %.

2. (Previously Presented) The superconducting device according to claim 1, having said oxide superconducting wire with said oxide superconductor exhibiting said sintering density of at least 95 %.

3. (Previously Presented) The superconducting device according to claim 2, having said oxide superconducting wire with said oxide superconductor exhibiting said sintering density of at least 99 %.

4. (Currently amended) A superconducting cable having comprising:

an oxide superconducting wire comprising an oxide superconductor having a sheath portion covering said oxide superconductor during a heat treatment and the sheath portion comprising one of silver and silver alloy; with an oxide superconductor exhibiting sintering density of at least 93 %;

wherein said oxide superconductor is a Bi-Pb-Sr-Ca-Cu-O-based oxide superconductor containing bismuth, lead, strontium, calcium and copper and including a Bi2223 phase having atomic ratios of (bismuth and lead):strontium:calcium:copper expressed as 2:2:2:3 in approximation; and

the oxide superconductor exhibiting sintering density of at least 93 %.

5. (Previously Presented) The superconducting cable according to claim 4, having said oxide superconducting wire with said oxide superconductor exhibiting said sintering density of at least 95 %.

6. (Previously Presented) The superconducting cable according to claim 5, having said oxide superconducting wire with said oxide superconductor exhibiting said sintering density of at least 99 %.

7. (New) The superconducting cable of claim 1, wherein the oxide superconductor wire has the sheath covering during a heat treatment.

8. (New) The superconducting cable of claim 1, wherein the oxide superconductor wire and the sheath are sintered.

9. (New) The superconducting cable of claim 4, wherein the oxide superconductor wire has the sheath covering during a heat treatment.

10. (New) The superconducting cable of claim 4, wherein the oxide superconductor wire and the sheath are sintered.

11. (New) A method for creating a superconducting cable comprising:
providing an oxide superconducting wire comprising an oxide superconductor having a sheath portion covering said oxide superconductor during a heat treatment and the sheath portion comprising silver or a silver alloy;

wherein said oxide superconductor is a Bi-Pb-Sr-Ca-Cu-O-based oxide superconductor containing bismuth, lead, strontium, calcium and copper and including a Bi2223 phase having atomic ratios of (bismuth and lead):strontium:calcium:copper expressed as 2:2:2:3 in approximation; and

and providing the oxide superconductor with a sintering density of at least 93%.

12. (New) The superconducting cable according to claim 11, further comprising providing the superconducting wire with said oxide superconductor exhibiting said sintering density of at least 95 %.

13. (New) The superconducting cable according to claim 11, further comprising providing the superconducting wire with said oxide superconductor exhibiting said sintering density of at least 99 %.